

# **YOUR LIFE. YOUR STORY. LATINO YOUTH SUMMIT:**

## **BUILDING LATINO ADOLESCENT RESILIENCE THROUGH A SUCCESSFUL COMMUNITY-ACADEMIC PARTNERSHIP**

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By expressing who we are, we define ourselves, call ourselves into being

**(Cambridge, 2010)**

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## ABSTRACT

Developing successful relationships between academia and community can be difficult. Investigators who want to work with community organizations often do not know where to start, or how to carry them out well. However, successful collaborations can speed up the transition from research to practice, and bring interventions to communities more effectively. We present the development of a successful partnership and the consequent intervention program, *Your Life. Your Story.*, a yearlong resiliency-building intervention for Latino youth at risk for depression. We present the exploratory study where our relationship began, as well as the preliminary findings that led to the design of our intervention. We then present the detailed components of the resiliency-building, emotional expression, coping and social support intervention. We also present preliminary qualitative and quantitative results and show the yearlong intervention plan. Throughout, we show, in sections in italics, how the partnership guaranteed that the study and intervention would succeed.

**Chapter Keywords:** Latino, acculturation, resilience, self-mastery, acculturative stress, depression, immigrants, adolescents, youth

# PHASE 1 – PARTNERSHIP DEVELOPMENT AND EXPLORATORY STUDY

## INTRODUCTION

*Community based participatory research (CBPR) “equitably involves all partners . . .with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities” (Wallerstein & Duran, 2010). The first step for a successful CBPR collaboration therefore is a problem that is amenable to research and of interest to both parties. In our case, the problem was Latino adolescent depression and suicide.*

A 2010 report prepared for the Indiana Minority Health Coalition, based on Youth Risk Behavior Survey (YRBS) data, identified a number of mental health indicators for which there are clear disparities in the Latino population of the state (Weathers, Zollinger & Kochhar, 2010). Of particular concern were the disparities noted among Indiana’s Latino youth: a 65% higher rate of suicide attempts and a 24% higher rate of depression (sadness or hopelessness that impeded usual activities) was reported among Indiana’s Latino high-school students in comparison to their non-Hispanic White peers (2005-2009). These disparities appeared to be sustained in the 2011 Indiana Youth Risk Behavior Survey, with a higher percentage of Latino youth reporting a suicide attempt and depressive symptoms than their non-Hispanic white peers (11.6% vs. 9.8% and 31.5 vs. 28.4% respectively).

This disparity was of grave concern to both the community and the academic partner. Mental health impacts the daily life of adolescents in regards to school performance, behavior, and overall personal functioning (Thapar, Collishaw, Phine, & Thapar, 2012). In addition to immediate effects and concerns, depression can have long-term effects over the life-course of adolescents by affecting school success, social development, and life opportunities (Wilson, Hicks, Foster, McGue, & Iacono, 2015). Given the rapid growth of the Latino population in Indiana, it was particularly important that we gain a greater understanding of the root causes of these mental health disparities among Latino youth so that we could identify effective ways to intervene and promote life-long health and wellbeing.

One factor contributing uniquely to the mental health of Latino youth is their immigrant heritage. Prior research has shown that there is a type of stress experienced by immigrants as they adjust between their native cultural values and customs and the new culture that surrounds them (Born, 1970). This is called **acculturative stress**. We theorized that acculturative stress is contributing to poor mental health outcomes, such as the higher rate of depression and suicide. By assessing acculturative stress in Latino adolescents who live in the Indianapolis area and correlating it to their mental health, we sought a better understanding of this relationship.

The Social, Attitudinal, Familial, and Environmental (SAFE) Acculturative Stress Scale is the most frequently used measure to investigate acculturation and stress levels in young immigrants. Findings with this measure suggested that “late immigrant students” (immigrating post age 12) suffered from acculturative stress more than “early immigrants” (pre age 12), and second- or third-generation students (Mena, Padilla & Maldonado, 1987), a finding corroborated by others (Thoman & Suris, 2004). Acculturative stress is a significant predictor of quality of life (Thoman & Suris, 2004). Most work examining acculturative stress has focused on its relation to deviant behavior (Epstein et al., 2003; Neieri et al., 2005; Segura et al., 2005; and McQueen et al., 2003) rather than mental health outcomes; thus, leaving the topic at hand open for more exploration by our team.

*At this point, the academic partner approached the Indiana Minority Health Coalition, a potential funding source that required a Community partner for funding. The Coalition recommended a Latino-serving community organization we had not worked with in the past. We set up a meeting and explained our concerns and thoughts about acculturative stress. Our Community Partner shared our concerns, and agreed that the stress of acculturation could be a potential factor. From that day forward, all discussions of what to do and how to do it were in meetings with the Community Partner, the Latino Health Organization (LHO). It was in these meetings that we mutually developed our research questions about acculturative stress and depression in Latino adolescents. LHO shared their practical and interpersonal experiences with the community. Our own search of the literature found support for what LHO was stating and identified the term (acculturative stress) for the phenomenon that LHO was describing. As a result, our final theoretical model was constructed (see Figure 1).*

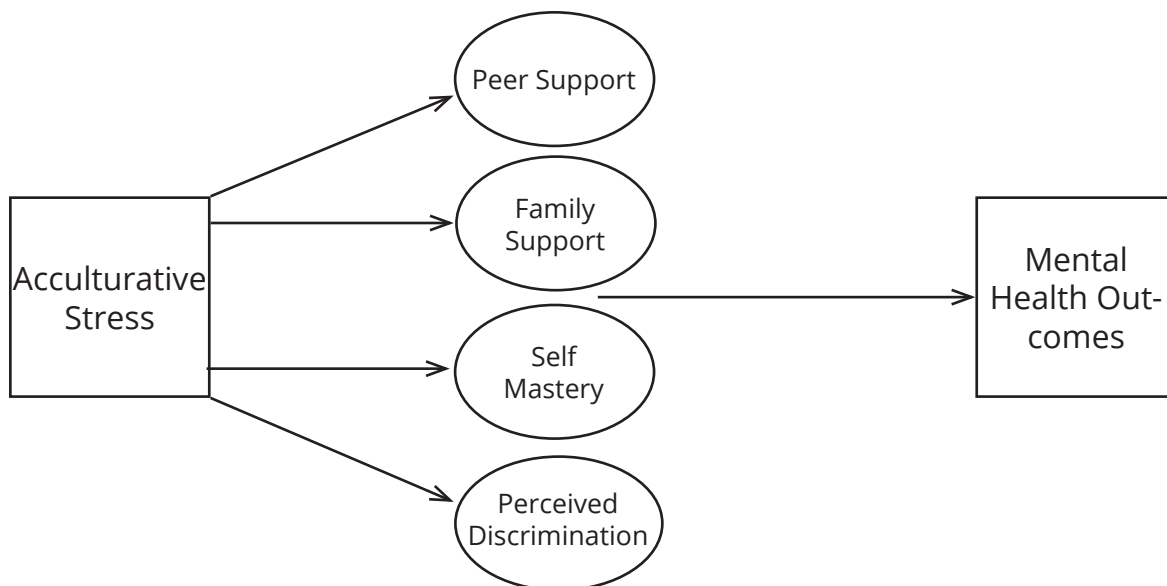
Specifically, we theorized that there are other factors mediating the relationship between acculturative stress and mental health outcomes - in other words, factors that make it more or less likely for Latino youth who are experiencing acculturative stress to develop depression or attempt suicide. Potential protective factors against acculturative stress, or its impact, include intrapersonal and interpersonal factors (Hovey & King, 1996; Mena, Padilla & Maldonado, 1987). These potential mediators included Peer Support, Family Support, Self-Mastery, and Perceived Discrimination.

Therefore, in the exploratory study we examined a sense of self-mastery, as well as social support and family functioning. Adolescents who experience self-mastery are more likely to see stressors as temporary events that they will be able to overcome. Peer social support, especially in the adolescent years, is instrumental to mental health (Colarossi & Eccles, 2003). A well-functioning family will not only protect against stress, but may be less likely to contribute to stress, especially acculturative stress which often requires the individual to ‘let go’ of cultural behaviors or beliefs in order to fit into the new culture (Hovey & King, 1996). Importantly, all of these potential mediators are amenable to change through intervention programs.

Perceived discrimination, on the other hand, may compound the acculturative stress. A recent systematic review found that mental health outcomes were the most commonly associated with discrimination (Priest, Paradies, Trenerry, Truong, Karlsen, & Kelly, 2013). We expected that acculturative stress could be associated with higher perceptions of discrimination leading to worse mental health outcomes.

As is common when examining stress and resources, the relationships among variables are often reciprocal, even transactional. For example, perceived discrimination or poor peer support may cause an individual to experience acculturative stress. However, we focus on the model as presented below because it fits with what our Community Partner observes on a daily basis, and with our goals to identify potential interventions to decrease negative mental health outcomes.

Figure 1 below provides a graphic representation of the hypothesized relationships among these variables.



*Figure 1.* Conceptual model of hypothesized relationships among variables

## OBJECTIVES

The purpose of the exploratory study was to develop a better understanding of the relationship between acculturative stress and mental health outcomes of Hispanic adolescents living in the Indianapolis area, as well as potential mediators of this relationship. This greater understanding would inform the design of interventions aimed at improving outcomes in this group and thereby reducing the disparities observed. The specific aims of this study were: 1) to identify levels of acculturative stress, 2) to identify sources of acculturative stress, 3) to assess whether acculturative stress is a predictor of mental health, 4) to assess whether peer support, family cohesion, perceived discrimination, and self-mastery mediate the relationship between acculturative stress and mental health outcomes among Latino adolescents in the Indianapolis area.

## METHOD

*The Indiana Minority Health Coalition's State Master Research Plan funded the study from November 2012 to June 2013. Completion of the study was made possible by drawing on the strengths and resources of each partner. The Community Partner facilitated recruitment, data collection, and understanding of the data; the academic partner led the decisions regarding design, obtained IRB approval, and conducted the quantitative data analyses. Both partners were present and active during data collection.*

### Design

The study employed a mixed-methods research design. Quantitative data were obtained from adolescent participants via several survey instruments (see Table 1 for instruments utilized), and complementary qualitative data were collected from parents during focus group sessions. These adolescent and parent data collection sessions were held simultaneously for ease and efficiency, given the need for parents to transport their children and consent to their participation. While our primary interest was in the adolescent assessments, we believed the qualitative data from parents would enrich our overall findings.

### Participant Recruitment

Following IRB approval obtained by the academic partner, LHO initiated recruitment from among the community it serves. Latino adolescents and their parent(s) living in the Indianapolis metropolitan area were eligible to participate. Phone calls were made and/or letters were sent to LHO client families with adolescent children to see if they would have interest in participating. The Community Partner also sent flyers and letters to community centers or churches where they have pre-existing ties and approval. Based upon responses of interested families, eight study sessions were planned and held in community locations. Each session lasted 60-90 minutes.

## Study Procedures

### *Adolescents*

No identifying information was collected from any participant, primarily to encourage adolescents to answer honestly without worry that their parents may discover how they answered. The researchers offered to each *adolescent* participant 1) written surveys in English or Spanish, whichever they preferred, or 2) the option to have the survey questions read aloud (privately) in the case that there were any participants who had trouble reading or writing.

### *Parents*

At the same time the adolescents were completing their questionnaires, *parents* participated in a focus group session with the leaders from LHO (VD) and the academic partner (SB). No identifying information or demographics were collected from parents. Members of the group were asked a variety of questions to explore their perspectives on the overall study theme of stress and sadness among Latino adolescents. Parents were asked to think of adolescents in general, including their own children and their children's friends. See the Appendix for a listing of the questions.

The sessions lasted about 45-60 minutes. Parents were also told that they could stop participation at any time if they felt uncomfortable. With participants' consent, the discussions were audio-recorded for subsequent transcription by LHO. Upon conclusion of each focus group, each parent received a \$10 gift card as token for participation.

*Table 1.* Instruments Completed by Adolescents

Construct	Measure
Acculturative Stress	SAFE Scale (Mena, Padilla & Maldonado, 1987) <i>24-item, Likert-scale responses</i> Example: "Loosening the ties with my country is difficult"
Social Support	CASSS (Malecki, Demaray, Elliot & Nolten, 1999) <i>50-item, Likert-scale responses</i> Example: "My close friend helps me when I need it"

Mastery	Self-Mastery Scale (Pearlin & Schooler, 1978)  <i>7-item, Likert-scale responses</i>  Example: "I have little control over the things that happen to me"
Family Cohesion	Family APGAR (Smilkstein, 1978)  <i>5-item, Likert-scale responses</i>  Example: "I am satisfied with the way my family and I share time together"
Perceived Discrimination	Perceived Discrimination Measure (Whitbeck et al, 2010)  <i>10-item, Likert-scale responses</i>  Example: "How often has the police hassled you because you are Hispanic?"
Depression	PHQ-9 (Kroenke & Spitzer, 2001). Has cutoffs for levels of depression as categorized in results section.

## DATA MANAGEMENT AND ANALYSIS

After each collection session, surveys were taken back to the academic team's office where the results were securely entered into statistical software (*IBM® SPSS® Statistics 20.0*). Audiotaped focus group discussions were transcribed by the Community Partner, then analyzed by both academic and community study staff for key themes. Cross-comparisons of focus group results for consistency with findings from adolescent surveys were completed as well.

## RESULTS

### Enrollment

Our target enrollment for the study was 60 adolescents and 60 parents. In the four months between January and April 2013, 86 adolescents and 103 parents participated in the study.

### Demographics

Demographics were not collected from parents who participated in focus groups, though we estimate that nearly two-thirds of participants were mothers. Among the adolescents, there was nearly an even representation of males and females, as well as younger (age 12-15) vs. older (16-19) adolescents. The majority of adolescents chose to complete the survey in English (90.7%) and reported that they spoke English with their friends (86.0%). In contrast, the majority (95.3%) reported speaking Spanish with



family. About two-thirds of these adolescents (62.8%) were immigrants themselves, having been born outside the United States. About one-third (33.7%) were born in the U.S., but their parents were born outside the United States. Only 3 participants (3.5%) were second-generation immigrants, with their parents and themselves both born in the United States. About two-thirds of the adolescent participants (62.8%) reported having all or mostly Hispanic/Latino friends, with about one-third (37.2%) reporting having all or mostly non-Hispanic/Latino friends.

## Main Findings

Table 2 below shows descriptive statistics for all our study variables.

Our first study objective was to identify levels of acculturative stress in our study sample of Latino adolescents. Scores had a median score of 26.5 and a mode of 26. Mean SAFE scores when categorized into quartiles were: Q1 (n = 22): Mean = 14 (SD = 4.74); Q2 (n = 21): Mean = 23.9 (SD = 1.90); Q3 (n = 21): Mean = 33.43 (SD = 4.85); Q4 (n = 22): Mean = 58.91 (SD = 11.18)

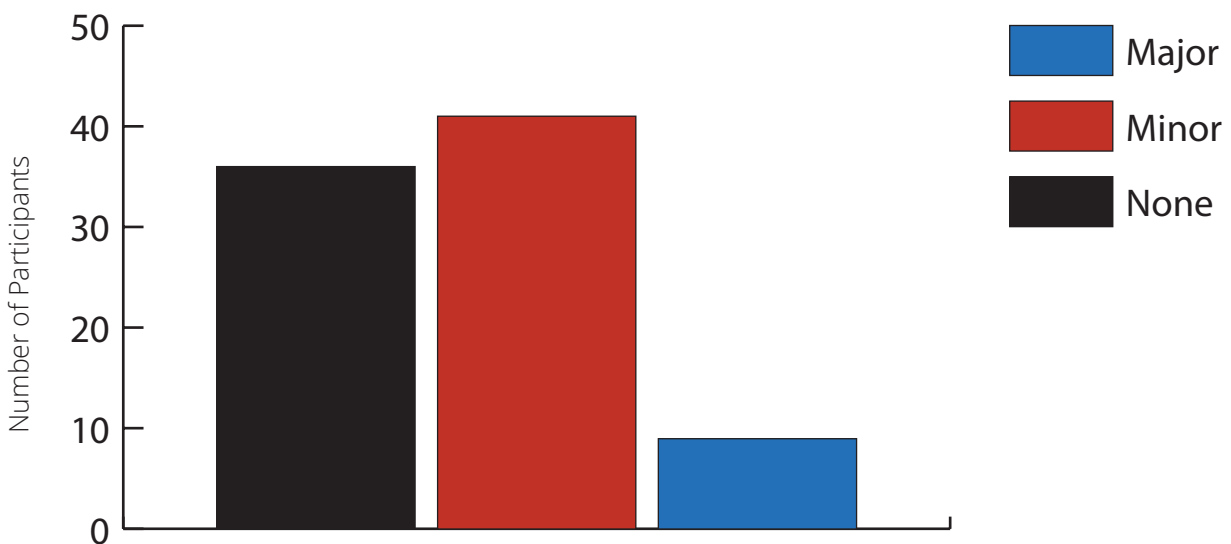
*Table 2. Descriptives for Study Variables*

<b>Variable</b>	<b>Mean (SD)</b>	<b>Min-Max</b>
Depression	6.6 (5.79)	0-25
Acculturative Stress	32.65 (18.18)	2-80
Self-Mastery	25.6 (5.17)	14-35
Social Support	125.94 (24.93)	60-183
Family Cohesion	7.44 (2.73)	0-10
Perceived Discrimination	14.48 (4.55)	10-34

The second objective of the study was to identify sources of acculturative stress (intrapersonal and interpersonal). Both parent focus groups and various survey data were taken into account to identify these sources. We found a number of possible sources including social support, family cohesion, self-mastery, and perceived discrimination, that we investigate further below. Thematic analysis of the qualitative focus group data suggests that parents might perpetuate acculturation issues because of the cultural divide that exists between themselves and their children. They worry that if they encourage their children to fully accept and assimilate with American customs and values that they will lose their previous heritage and identity. The statement below exemplified a recurrent theme expressed by parents:

*"...But she has our culture. So I have always told her that she has to embrace her culture. That she has Hispanic parents, that she looks Hispanic, that she does not look American, so she has to know that it is her culture, it is her roots and that she should not forget that."*

The third objective of the study was to investigate whether acculturative stress was related to depression as measured by the PHQ-9. The PHQ-9 is a brief and reliable depression screener that allows for estimation of means (6.6 in our sample) and standard deviation (5.8 in our sample) as well as categorization into none, mild, moderate or severe depression. Figure 2 below shows 58.2% of these adolescents experiencing minor (47.7%) or major (10.5%) depression.



**Figure 2.** Levels of Depression in Latino Adolescents (n=86)

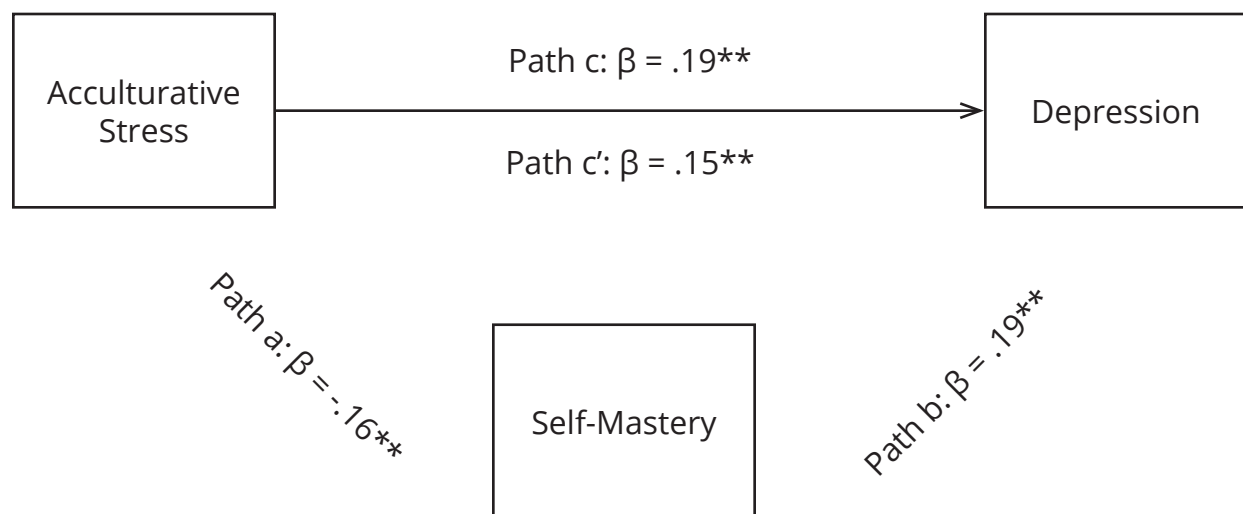
Correlations between acculturative stress and depression were strong ( $r = .61, p < .001$ ), showing that higher depression scores were related to higher acculturative stress scores.

The final aim of the study was to investigate possible mediators of the relationship between acculturative stress and depression, such as social support, family cohesion, self-mastery, and perceived discrimination. Correlation analyses showed that all these variables correlated significantly with acculturative stress and depression.

**Table 3.** Correlations of Acculturative Stress and Depression with Possible Mediators

	Social Support	Family Cohesion	Self-Mastery	Discrimination
Acculturative Stress	-.238*	-.300**	-.57**	.38**
Depression	-.381**	-.38**	-.51**	.24*

Mediation analyses using Hayes' INDIRECT Macro showed that only self-mastery mediated the relationship between acculturative stress and depression ( $p < .001$ ; see figure below).



**Figure 3.** Mediation Analyses

### Focus Group Results

Within each parental focus group, several key themes were consistently noted: 1) worrying about their adolescents in regards to depression and stress (*"They do not want to talk, so no one can tell that something is going on, whether it be in school, with friends, at home."*); 2) feeling unprepared and unsure of how to address these issues with their adolescents (*"...I do not have any other family here to help me take care of them or to give me advice on how to help them. This is difficult for me."*); 3) expressing concern that if their adolescent assimilated within American culture that they will lose their heritage and identity (*"...she has Hispanic parents, that she looks Hispanic, that she does not look American, so she has to know that it is her culture, it is her roots and that she should not forget that."*); and 4) expressing a lack of access to necessary mental health care (*"There are support centers but those are not accessible.... sometimes our income is not enough to send our teens to a good psychologist or support group."*).

## **Discussion**

Very low to moderate levels of acculturative stress were reported by adolescent participants based upon the SAFE scale; none reported high levels despite the fact that more than half are immigrants themselves, born outside the United States. However, acculturative stress was significantly associated with depression in our adolescent participants.

While the levels of acculturative stress were lower than anticipated, the prevalence of depression reported by these Latino adolescents was higher than expected at nearly 60% (10.5% classified as major depression). This is concerning, and clearly exceeds national averages for all adolescents. According to the National Institutes of Mental Health (2013), approximately 11% of adolescents (across all ethnicity/race) have depression. The most recent YRBS data from 2011 suggests that 32.6% of Indiana Latino adolescents reported feeling sadness or hopelessness that impeded their usual activities. While our study data are not completely comparable to these general national averages and YRBS data, our findings suggest that depression (quite possibly related to acculturative stress) is a significant problem that Latino adolescents around the Indianapolis area are facing. Depression may, in fact, be more prevalent among Indiana's Latino adolescents than previously thought. Given both the serious immediate impact of depression and the long-term effects on an adolescent's future quality of life, we determined that culturally sensitive interventions were needed. Parent focus groups substantiated the need for clearer guidance on how they may help their children manage stress and sadness, both by way of family support and access to mental health services.

## **Phase 1 Limitations**

While we view this study as a success overall, there were some limitations. In terms of recruitment, we recruited Latinos who were either attending a church or seeking services at a community organization and thus were somewhat integrated into a community and interested in the topic of the study. Therefore, our sample may not have been representative of the general population, like the YRBS. On the other hand, it likely represented the population that would be interested in interventions offered through the Community Partner. Additionally, the survey packet we created was quite extensive. Given the length of time it took to complete, it is possible that some participants may have lost interest or focus while completing the packet. In anticipation of this concern, the measures most relevant to the main research question, and the ones reported here, were included early in the packet. Therefore, the findings reported here are not likely affected by participant burden.

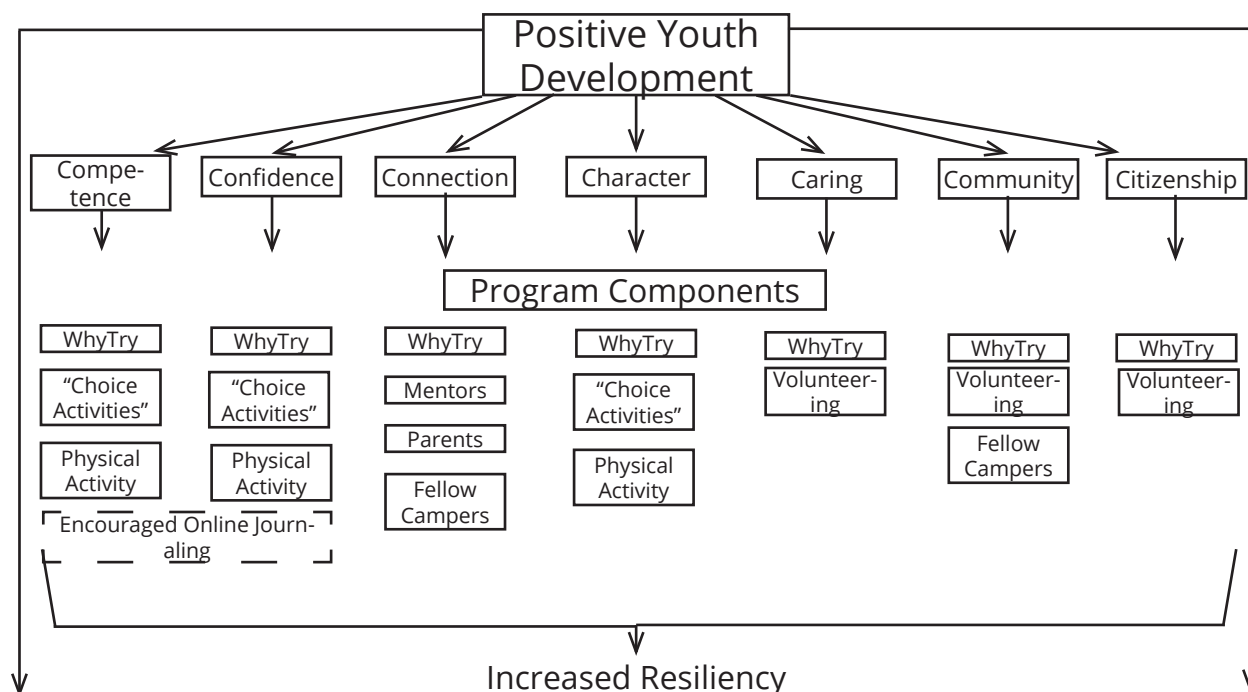
## Conclusions and Next Steps

*Through this funding opportunity, we had a successful experience and created a strong community-academic partnership. Together we brought our strengths to one synergistic and collaborative project and investigated a shared concern. Our success in this exploratory project demonstrated our ability to work together on a common goal and motivated us to build on this exploratory study and design an intervention that targets the issues these Latino adolescents are facing in regards to acculturation and dealing with that stress, as an attempt to prevent depression.*

## PHASE 2: INTERVENTION DEVELOPMENT AND PLANNING

### YOUR LIFE. YOUR STORY. LATINO YOUTH SUMMIT

The conceptualization, development, and planning of the intervention was also a joint project that built on the strengths and resources of each partner. Each 'we' statement listed below reflects a true and



whole collaboration among the team, all the academic partner members and the Community Partner. It was important that the intervention reflect the larger Latino culture but also the smaller subculture of Latinos in Metropolitan Indianapolis, where the Community Partner served.

We planned a multicomponent intervention, consisting of an initial weeklong summer camp, followed by monthly booster sessions aimed at increasing resilience as a protective factor against depression. Resilience, or the ability to bounce back and even thrive when faced with adversity (Richardson, 2002), is a result of certain “qualities of individuals and support systems that predict social and personal success” (Richardson, 2002, p. 308). These qualities are identified in the Positive Youth Development Framework (PYD), which guided our work. We developed an intervention to provide adolescent Latinos the opportunity to increase resilience by increasing competence, confidence, connection, character, caring, community, and citizenship with the aim to decrease the rates of suicide and depression.

## **RATIONALE FOR INTERVENTION CHARACTERISTICS**

A meta-analysis of interventions to prevent depression in adolescents found that in general these are effective, with 41% of the 32 programs evaluated producing effects (Stice et al., 2009). The most successful interventions were identified by design and participant characteristics. In terms of design, shorter interventions, with homework, and administered by professionals fared best. In terms of participants, those that recruited high-risk, female, and older adolescents fared best. *Our planned intervention would consist of a short, intensive weeklong summer day program with monthly follow up booster sessions for one year. The program would be administered by professionals and target 14 to 17 year old adolescents.*

Resilience protects against depression and promotes positive youth development in general (Fergus & Zimmerman, 2005); in our preliminary work, self-mastery, a component of resilience (similar to Competence + Confidence) was found to predict acculturative stress and through acculturative stress, depression, and therefore is a good focus for our intervention. Resilience has been found to moderate depression in at-risk groups, such as individuals exposed to childhood abuse (Campbell-Sills et al., 2005; Wingo et al, 2010). Resilience is not a one-dimensional construct; instead, it consists of a number of protective factors and qualities. Different researchers and theorist identify different factors related to resilience, although they all fit within the PYD framework. For example, Herrman et al. (2011) identify intrapersonal factors (such as locus of control, self-mastery, cognitive appraisals), interpersonal factors (such as relationships with family and friends) and system factors (such as good schools and community services), and Reivich et al. (2013) identified emotion regulation, impulse control, causal analysis, realistic optimism, self-efficacy, empathy, and reaching out. The Positive Youth Development Framework (see figure above) includes these interpersonal factors under the 7Cs and is the framework that guides the present study. *Our program would focus on developing these intrapersonal factors or qualities through WhyTry and the Choice Activities, and interpersonal factors or qualities through the development of peer and mentor relations.*

Our program was designed with a focus on children of immigrants, who may or may not have been born in the U.S., and may be those most likely to experience acculturative stress. The Children of Immigrants Longitudinal Study, which began in 1992 and has followed their large sample to young adulthood (Portes & Rumbaut, 2007) shows that children of low SES immigrant parents struggle with prejudice and discrimination and adjusting to the new culture while maintaining their own language and values (Portes & Rivas, 2011), what we refer to as acculturative stress. These findings match our own from our exploratory study described above. Importantly, these struggles may limit their opportunities for upward mobility (Portes & Rivas, 2011). Using the same Longitudinal Study data, Haller et al. (2011) found problematic advancement among Mexican American second-generation individuals who, like our own target youth, come from low socioeconomic status and parents who struggle with acculturation. Haller et al. (2011) conclude that if the second generation does not succeed in upward mobility, it is not likely to happen to subsequent generations either. Alba et al. (2011) present a more optimistic view. They conclude that the English fluency, higher educational attainment than their parents, and better jobs of second generation Mexican Americans are all indicators of success, especially when compared to the general white population, albeit not compared to other immigrant groups, such as Asians. Both Haller et al. (2013) and Portes and Rivas (2011) recommend programs specifically for children of low SES non-white immigrants to increase their potential for success. Areas of focus include self-identity and self-esteem to improve school completion (and in our estimation reduce acculturative stress). *Our Choice Activities, explained below, would help participants develop, or further develop their self-identity*

*(competence/confidence) through telling the story of who they are.* According to Zimmerman et al. (2013), racial/ethnic identity can be an asset if individuals are able to assign positive significance and meaning to their self. This identity protects them against stereotyping and prejudice, and helps them succeed in straddling two cultures.

Our rationale for creating a summer immersive experience for resilience building was based on evidence of the success of these programs in increasing resilience (Allen, Cox, & Cooper, 2006), and the interest in such a program by our Community Partner. Ewert and Yoshino (2011) report that resilience can be increased within a camp experience through activities that are challenging and social. Although our program does not fit all the characteristics of a camp as defined in camp research (outdoor living, away from home; Bialeschki et al, 2007), it does fit others (include trained leaders to accomplish intentional goals, have enjoyable activities, teamwork), and therefore research findings on camp outcomes may be relevant to our program, especially findings from outcome-based camps. In general, camps, especially outcome-based camps such as ours, have a number of positive benefits for participants, and may be ideally suited for positive youth development (Thurber et al., 2007). For example, in a one-week immersive science camp, campers reported improved peer relationships and increased confidence among the beneficial outcomes (Fields, 2014). A review of camp research found that as a result of camp, children improved in confidence, self-esteem, social skills, independence and leadership (Bialeschki et al., 2007).

We chose to integrate the WhyTry program into the camp curriculum because it is an active learning, experiential, resilience training program designed specifically for youth. The program uses analogies to teach children resilience-building skills. Research on WhyTry consists mostly of program evaluation research; however, it is consistently positive. In dissertation studies, WhyTry was found to increase self-efficacy and improve outcomes on the Achenbach Scale (Baker, 2008), reduce expulsions among conduct-disordered children (Minor, 2009), as well as improve school behavior and locus of control, and reduced social stress and anxiety (Wilhite, 2010). In program evaluations, WhyTry shows improvements in pro-social behavior and emotional health (Mortenson & Rush, 2007), self-esteem, hope, agency, and motivation (Bird, 2010), and school achievement (Bushnell & Card, 2003; Williams, 2009).

The Choice Activities, which involve artistic and creative work, support a growing body of evidence on the therapeutic effects of the arts. Among the value added by such programs is the opportunity that is given to youth to express themselves through non-verbal means and reduce tension while doing so (Coholic et al., 2012). In a recent qualitative study, Davies et al.'s (2014) participants reported increased resilience, self-efficacy, and improved mental health, among many other positive outcomes. For each of our Choice Activities, there are published reviews of research that support it as an evidence-based approach to improving mental health outcomes (see Robb et al., 2014 for music therapy; Slayton et al., 2010



for art therapy; Cramer et al., 2013 for yoga/dance). These activities as a whole focus on storytelling. Storytelling, narrative discourse, journaling, and other forms of oral or written reporting, of true and or imagined stories, also has a growing body of evidence supporting its value for mental health, including among Latino youth (Malgady, 2011).

Unique to this program is the student-centered approach to the curriculum. One of our academic partners, Youngbok Hong, MFA, developed the framework for the Choice Activities based on focus groups with Latino youth conducted earlier in the spring. This curriculum framework was shared with all Choice Activity leaders so that they would design their week integrating five concepts that emerged from the focus groups that complemented the WhyTry activities. These concepts were built around the following questions: 1) Who am I now? 2) Who do I want to be? 3) What may get in my way? 4) How will I overcome this? and 5) How will I maintain this? This approach created continuity and reflected the vision of *Your Life. Your Story.* as a setting where adolescents could tell their story, and in doing so, define who they are. We instructed our Choice Activity Leaders to be aware of, and if necessary, to focus on identification of acculturative stress and its resolution and management through the self-expression and coping that can be developed through the activities.

The assignment of a mentor to each participant is based on Social Cognitive Theory and modeling. There is much research on natural mentors and their value for resilience building and PYD (Schwartz et al., 2013). *Our mentors would be young, bachelor's level college students. Our mentors would not serve as surrogate parents as natural mentors tend to be; we planned for mentors that reflected where our participants could be in a few years' time, similar to a peer-to-peer mentoring program. We intended our mentors to model academic achievement and the 7Cs of PYD.* Birman and Morland's review of formal mentoring programs for immigrant youth suggest the need for cultural competency training for mentors, which we conducted.

We believe the most significant aspect of the study is that it addresses an important problem for youth with an easy to implement and easily translatable intervention that is made culturally responsive by including mentors and staff that are of the same cultural group and/or received cultural competency training. According to Boustani et al. (2014), "significant challenges in transporting evidence-based programs to community settings have been documented extensively.....these challenges are even more pronounced in communities of poverty, where the potential for impact is greatest and most urgent." (page 1). In spite of these difficulties, "collaborative community-based helping approaches that are sustainable and strengths based and target multiple issues and outcomes" are being called for by a number of researchers (Coholic et al., 2012, page 347).

It was important that the Community Partner 'own' the intervention in order to increase the odds of

sustainability into the future. With this in mind, it became evident that a lengthy, involved program would not be feasible for this community, or necessary for the goals of the program. The program we developed could be adopted more easily and implemented by our Community Partner and other agencies that serve Latinos.

Furthermore, in terms of the general scientific literature, we found few studies, if any, that focused on interventions to increase resilience, address acculturative stress, or decrease/prevent depression in low SES second generation Latinos, even though there is a significant body of work that suggests that this group is in dire need of supportive interventions that may improve mental health and help break the cycle of poverty and low educational attainment. The challenges faced by these youth and identified in our exploratory study suggest the need for resilience building interventions.

*Our Community Based Participatory Research (CBPR) approach to creating and implementing the intervention addresses the challenges of translational research by a) increasing external validity, b) reducing the 'academic knowledge' and increasing 'hybrid knowledge' to create more culturally supported interventions, c) improving discourse between academia and community, d) shifting power away from universities through collective decision making and outcomes that are beneficial to the community, and finally e) improving trust through formal agreements and sustained long-term relationships (Wallerstein & Duran, 2010).*

## **PHASE 3: PILOT TESTING YOUR LIFE. YOUR STORY. LATINO YOUTH SUMMIT**

Although there are many summer programs aimed at improving quality of life for children of all ages, there are few that systematically attempt to increase resilience within a research framework with Latino youth in the general population. If this intervention succeeded, it would be a first step toward becoming an evidence-based intervention for a growing problem in a vulnerable population.

We began testing the intervention with a pilot study that would provide the rationale for the intervention for a larger randomized controlled trial, solidify new and established relationships with additional partners, and refine the intervention so that the one proposed in the larger study has a higher likelihood of success.

The pilot study had the following aims:

**Feasibility:**

Determine a) rates of recruitment, b) rates of attendance, and c) rates of completion

**Appropriateness of Choice Activities and Community Partners leading them**

Determine whether the Choice Activities and the Community Partners that lead them are appropriate for the larger study

**Youth and Parent Satisfaction with Intervention:**

Determine levels of satisfaction with the various components of the intervention, including the mentoring relationship

**Preliminary determination of efficacy:**

Obtain an estimate of effect size for intervention efficacy that can be used to determine the program participant sample size and for the future study evaluation design

## METHODS

**Participants**

Latino adolescents ( $n = 30$ ) between the ages of 13 and 17 were recruited by LHO from among the families they serve, as well as families served by other Latino-serving organizations.

***Sample size determination:*** The sample size for this pilot study was an estimate of what would be appropriate for a week-long summer camp, given our goals and resources.

***Comparison Group:*** Another Latino-serving Community Partner that runs youth camps every summer served as a comparison group. Their camps are 8 weeks long and provide a number of activities, but they are not geared toward resilience building or mental health. We recruited a sample of their camp participants matched in gender and age to our selected participants. This group was assessed before their first week of camp and immediately after their first week. This allowed them to serve as an attention comparison group. It must be noted that their camp dates did not coincide with our camp dates; however, we were able to assess them just before and right after their first week, which provided a somewhat comparable experience without the key components of our planned intervention. Table 2 below shows demographics of participants by group. Unlike the Comparison Group, the Study Group had more participants in the older teen years, which might bias the Study Group toward higher depression rates. In contrast, the Comparison Group had a higher percentage of immigrant participants, which might bias the Comparison Group toward worse outcomes.

Table 4. Demographics of Comparison and Study Groups

DEMOGRAPHICS	COMPARISON GROUP (N=29)	STUDY GROUP (N=29)
<b>Age</b>		
Younger (12-14 years)	58.6%	48.6%
Older (15-18 years)	41.4%	51.4%
<b>Gender</b>		
Male	65.5%	57.1%
Female	34.5%	42.9%
<b>Immigrant Status</b>		
Immigrant	44.8%	33.3%
First Generation	51.7%	66.7%
Second Generation	3.4%	0.0%

## Procedures

Teens attended the camp from June 23<sup>rd</sup> through June 27<sup>th</sup>, 2014. There was a bilingual Camp Orientation on June 22 and a Camp Completion Celebration on June 28 that included parents, where each teen was able to showcase projects from the YLYS week. Parents provided transportation for their children to and from the camp, which took place at Herron School of Art in Downtown Indianapolis, as well as to booster sessions, which are currently taking place at either LHO or other community venues.

*Summer Camp:* 30 Latino teens (ages 12-17) attended the camp, which took place from 8:00am until 5:00pm each day. The camp was held at IUPUI so that students could experience and explore a college campus. Students were recruited through various community connections and represented multiple Latino communities from Indianapolis.

Each participant was assigned a mentor, an undergraduate student at IUPUI. Each mentor had four to six teens under his/her charge. These mentor-teen partnerships began at the summer camp and continue throughout the year of the study.

Each day of camp started with breakfast and ice-breakers with the mentors. After breakfast, the group was split into three separate groups for WhyTry activities and stayed in the same groups through the entire week. After WhyTry, the teens spent an hour and a half participating in physical activity outside. The exercise-based activities varied throughout the week, and on Wednesday of camp week, the teens walked to the Indy Eleven (local professional soccer team) field to meet players and practice on the field. After physical activity, the teens were served lunch and had a break. The rest of the afternoon was filled with the 'Choice Activities' which were the emotional expression activities designed around a common

framework to help each teen share his or her story. Each teen selected three out of the five activities from: storytelling, yogadance, art, music, and technology, and stayed in these activities all week. The teens were also provided an afternoon snack between the second and third 'Choice Activity' sessions.

**Booster Sessions:** Follow-up sessions with the participants will continue until June 2015. There will be a total of 10 booster sessions August through May, which include components from WhyTry and Choice Activities, in addition to any additional needs reported by the youth, the parents, or the Community Partner. Some sessions will include special activities for parents who have asked for programming tailored to them.

Participating youth receive a \$10 incentive for each booster session they attend as a token of appreciation for completing the surveys given during the session. In addition, each participant has monthly contact with his/her mentor in an unstructured fashion, but still aimed toward the goals of the program.

## **Preliminary Findings**

To investigate the impact of the YLYS camp from a research standpoint, we collected multiple questionnaires at multiple points in time from the teenagers. In order to examine how resilience and depression changed over the week, the teens completed questionnaires on those variables at baseline (pre-test) and after the camp ended (post-test). We also collected data on other variables of interest such as acculturative stress, positive youth development, self-mastery, mentor relationship, and satisfaction with camp and each camp activity.

After one week of camp, within group analyses suggest that the YLYS camp had a statistically significant impact on participants with increase in resilience and decrease in depressive symptoms ( $p < .05$ ). The satisfaction of study participants with the YLYS camp was measured as well. All participants agreed or strongly agreed with items such as, "I had an excellent time," "I felt welcomed," "I found new ways to deal with stress and problems," and "YLYS helped me feel more confident in my life choices."

## **Next Steps and Future Direction**

As the YLYS booster sessions continue to progress over the next year, the team will continue to monitor the program's effectiveness. Once data has been fully analyzed, the team will collaboratively tailor the program and make any necessary adjustments as suggested by the data. As previously mentioned, this initial pilot will hopefully be the first step towards the creation of an evidence-based intervention for a growing problem in this vulnerable population.

As the program continues to be implemented, there is more and more momentum and excitement from the Latino community at large and local organizations that serve the Latino community, and the

team is dedicated to continue moving forward. As we collaboratively plan for next steps, we envision several groups joining the program each year and creating a plan for long-term follow-up of participants. Additionally, if feasible and with sufficient funding, we hope to allow each group to participate in a second year of camp, with the second year taking youth to a higher level of mastery and resilience including sessions on future-oriented goal development and career and college preparation.

Starting with a synergistic CBPR partnership between the Latino Health Organization and the Indiana University Richard M. Fairbanks School of Public Health to investigate an alarming health disparity in Indiana Latino youth, we have not only gained knowledge on possible reasons for why this mental health disparity exists, but more importantly, we have translated those findings into action that meets the needs of the community through the help of additional partners and support from the community we serve.

## **Practical Applications**

In reflecting back on the last several years of truly synergistic collaboration, we feel compelled to share strategic approaches that have worked for our partnership, in hopes that it encourages others to utilize community-based research strategies.

### ***Community partners bring expertise to the partnership that is just as important as the Academic Partner's.***

However, when there are differences in educational level and training in research, the community partners may not realize their value and may be reluctant to approach researchers for collaboration. It is important that researchers demonstrate respect and value for the contributions of the community partner, while at the same time not expect what the partner cannot offer in terms of expertise. As we demonstrated above, we would communicate with the community partner in lay language and then use the literature to find the academic language that explains what the partner states, a language that is needed for effective literature searches and reviews.

***Both partners must benefit from the relationships.*** Otherwise, it will be short lived. When both partners make sure there is mutual benefit, further studies and service activities can occur and result in more publications, more benefit to the community, and stronger relationships among partners. Even when we do not have active, ongoing research, we are mindful of each other's needs. For example, researchers have access to students who want to get experience in community settings. Community partners have constant need for manpower and free help. These facts lead to opportunities to benefit the community partners and the university students in a mutually beneficial way. Another way in which we stay involved with our partner is by sharing university events (talks, workshops) and our own expertise as advice when needed. In one instance, our community partner asked us to accompany them to a meeting with another faculty on campus to help them better understand the requests from the faculty and whether they could 'trust' this person.

*Being present in these ways even when not actively collaborating on a project will increase the odds that the partners will chose each other for the next project.* Working with someone whom you are already familiar with facilitates progress, decreases time to completion, and increases the odds of success. A framework of respect, shared goals, and true belief in a partnership and all that the term entails makes for strong and long lasting collaborative relationships.

## REFERENCES

- Achenbach, T.M. (1991). *Integrative Guide for the 1991 Child Behavior Checklist/4-18, YSR, Teacher's Report Form Profiles*. Burlington: University of Vermont, Department of Psychiatry.
- Alba, R., Kasinitz, P., & Waters, M. C. (2011). The kids are (mostly) alright: Second-generation assimilation: Comments on Haller, Portes and Lynch. *Social Forces*, 89 (3), 763-773.
- Allen L.R., Cox, J., & Cooper, N.L. (2006). The impact of a summer day camp on the resiliency of disadvantaged youth. *Journal of physical education, recreation, and dance*, 77(1), 17-23.
- Baker, D. (2008). *Examining the effectiveness of the WhyTry program for children receiving residentially based services and attending a non-public school*. University of Southern California.
- Bialeschki, M. D., Henderson, K. A., & James, P. A. (2007). Camp experiences and developmental outcomes for youth. *Child and adolescent psychiatric clinics of North America*, 16(4), 769-788.
- Bird, B. (2010). *"WhyTry Evaluation Report 2006-2010."* Churchill County Probation Report, Field Research.
- Birman, D., & Morland, L. (2013). Immigrant and Refugee Youth. *Handbook of Youth Mentoring*, 355.
- Born, D. (1970). Psychological adaptation and development under acculturative stress: Toward a general model. *Social Science and Medicine* 3, 529-547.
- Boustani, M. M., Frazier, S. L., Becker, K. D., Bechor, M., Dinizulu, S. M., Hedemann, E. R.... & Pasalich, D. S. (2014). Common Elements of Adolescent Prevention Programs: Minimizing Burden While Maximizing Reach. *Administration and Policy in Mental Health and Mental Health Services Research*, 1-11.
- Bushnell, B., & Card, K. (2003). "Alpine School District Longitudinal Study." Unpub-



- lished evaluation for the Alpine School District, Provo, UT.
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, 44(4), 585-599.
- Coholic, D., Fraser, M., Robinson, B., & Loughheed, S. (2012). Promoting resilience within child protection: The suitability of arts-based and experiential group programs for children in care. *Social Work with Groups*, 35(4), 345-361.
- Colarossi, L.G., & Eccles, J.S. (2003). Differential effects of support providers on adolescents' mental health. *Social Work Research*, 27 (1), 19-30.
- Cramer, H., Lauche, R., Langhorst, J., & Dobos, G. (2013). Yoga for depression: A systematic review and meta-analysis. *Depression Anxiety*, 30: 1068–1083.  
doi: 10.1002/da.22166
- Davies, C.R., Knuiman, M., Wright, P., & Rosenberg, M. (2014). The art of being healthy: A qualitative study to develop a thematic framework for understanding the relationship between health and the arts. *BMJ Open*.
- Epstein, J.A., Doyle, M., & Botvin, G.J. (2003). A mediational model of the relationship between linguistic acculturation and poly drug use about Hispanic adolescents. *Psychological Reports* 93, 859-866.
- Ewert, A., & Yoshino, A. (2011). The influence of short-term adventure-based experiences on levels of resilience. *Journal of Adventure Education and Outdoor Learning*, 11(1), 35-50.
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annu. Rev. Public Health*, 26, 399-419.
- Haller, W., Portes, A., & Lynch, S. M. (2011). Dreams fulfilled, dreams shattered: Determinants of segmented assimilation in the second generation. *Social Forces*, 89(3), 733-762.

- Hanson, T. L., & Kim, J. O. (2007). Measuring resilience and youth development: The psychometric properties of the Healthy Kids Survey. *Issues & Answers Report, REL*, (034).
- Herrman, H., Stewart, D. E., Diaz-Granados, N., Berger, E. L., Jackson, B., & Yuen, T. (2011). What is resilience? *Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie*, 56(5), 258-265.
- Hovey, J.D., & King, C.A. (1996). Acculturative stress, depression, and suicidal ideation among immigrant and second-generation Latino adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry* 35(9), 1183-1192.
- Kroenke K., & Spitzer, R.L. (2002). The PHQ-9: A new depression and diagnostic severity measure. *Psychiatric Annals*, 32, 509-521.
- Kroenke, K., Spitzer, R., & Williams, W. (2001). The PHQ-9: Validity of a brief depression severity measure. *JBIM*, 16, 606-616.
- McQueen, A., Getz, J.G., & Bray, J.H. (2003). Acculturation, substance use, and deviant behavior: Examining separation and family conflict as mediators. *Child Development*, 74, 1737-1750.
- Malecki, C.K., Demaray, M.K., Elliot, S.N., & Nolten, P.W. (1999). The Child and Adolescent Social Support Scale. DeKalb, IL: Northern Illinois University.
- Malgady, R. G. (2011). Culturally Competent Psychotherapy for Hispanic/Latino Children and Adolescents. *Cultural Competence in Assessment and Intervention with Ethnic Minorities: Some Perspectives from Psychology and Social Work*, 51.
- Mena, F.J., Padilla, A.M., & Maldonado, M. (1987). Acculturative stress and specific coping strategies among immigrant and later generation college students. *Hispanic Journal of Behavioral Sciences* 9 (2), 207-225.

- Minor, Y. M. (2009). "Effectiveness of the WhyTry Program in Working with Children with Conduct Disorders." Doctoral Dissertation, Argosy University, Sarasota, FL.
- Mortenson, B., & Rush, K. (October 2007). "PRIDE: 28-day Summer Program for At-Risk Students." Research Committee At Townson University.
- National Institutes of Mental Health (2013). Depression in children and adolescents. Retrieved on June 1, 2013 from: <http://www.nimh.nih.gov/health/topics/depression/depression-in-children-and-adolescents.shtml>
- Nieri, T., Kulis, S., Keith, V.M., & Hurdle, D. (2005). Body image, acculturation, and substance abuse among boys and girls in the Southwest. *The American Journal of Drug and Alcohol Abuse*, 31: 617-639.
- Pearlin, L.I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior* 19(1), 2-21.
- Pew Hispanic Center. (2012). Demographic Profile of Hispanics in Indiana, 2010. Retrieved from: <http://www.pewhispanic.org/states/?stateid=IN>
- Portes, A., & Rivas, A. (2011). The adaptation of migrant children. *The future of children*, 21(1), 219-246.
- Portes, A., & Rumbaut, R. G. (2007). *Children of Immigrants Longitudinal Study (CILS)*, 1991-2006.
- Priest, N., Paradies, Y., Trener, B., Truong, M., Karlsen, S., & Kelly, Y. (2013). A systematic review of studies examining the relationship between reported racism and health and wellbeing for children and young people. *Social Science & Medicine*, 95, 115-127.
- Reivich, K., Gillham, J. E., Chaplin, T. M., & Seligman, M. E. (2013). From helplessness to optimism: The role of resilience in treating and preventing depression in youth. In *Handbook of Resilience in Children* (pp. 201-214). Springer US.
- Richardson, G. E. (2002). The metatheory of resilience and resilience. *Journal of Clin-*

- ical Psychology, 58(3), 307-321.
- Robb, S. L., Burns, D. S., Stegenga, K. A., Haut, P. R., Monahan, P. O., Meza, J., Stump, T. E., Cherven, B. O., Docherty, S. L., Hendricks-Ferguson, V. L., Kintner, E. K., Haight, A. E., Wall, D. A., & Haase, J. E. (2014). Randomized clinical trial of therapeutic music video intervention for resilience outcomes in adolescents/young adults undergoing hematopoietic stem cell transplant: A report from the Children's Oncology Group. *Cancer*, 120, 909-917. doi: 10.1002/cncr.28355
- Schwartz, S. E., Chan, C. S., Rhodes, J. E., & Scales, P. C. (2013). Community Developmental Assets and Positive Youth Development: The Role of Natural Mentors. *Research in Human Development*, 10(2), 141-162.
- Segura, Y., Page, M., Neighbors, B., Nichols-Anderson, C. & Gillasp, S. (2003). The importance of peers in alcohol use among Latino adolescents: The role of alcohol expectancies and acculturation. *Journal of Ethnicity in Substance Abuse*, 2, 31-47.
- Smilkstein, G. (1978). The family APGAR: A proposal for a family function test and its use by physicians. *Journal of Family Practice* 6(8), 1231-1239.
- Slayton, S. C., D'Archer, J., & Kaplan, F. (2010). Outcome studies on the efficacy of art therapy: A review of findings. *Art Therapy*, 27(3), 108-118.
- Stice, E., Shaw, H., Bohon, C., Marti, C. N., & Rohde, P. (2009). A meta-analytic review of depression prevention programs for children and adolescents: factors that predict magnitude of intervention effects. *Journal of Consulting and Clinical Psychology*, 77(3), 486.
- Thapar, A., Collishaw, S., Pine, D. S., & Thapar, A. K. (2012). Depression in adolescence. *The Lancet*, 379(9820), 1056-1067.
- Thoman, L., & Suris, A. (2004). Acculturation and acculturative stress as predictors of psychological distress and quality-of-life functioning in Hispanic psychiatric patients. *Hispanic Journal of Behavioral Sciences*, 51, 730-742.

- Thurber, C. A., Scanlin, M. M., Scheuler, L., & Henderson, K. A. (2007). Youth development outcomes of the camp experience: Evidence for multidimensional growth. *Journal of Youth and Adolescence*, 36(3), 241-254.
- United States Census Bureau (2012). 2010 Indiana Demographic Profile. Retrieved from [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_DP\\_DPDP1](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1)
- Wallerstein, N., & Duran, B. (2010). Community-based participatory research contributions to intervention research: The intersection of science and practice to improve health equity. *American Journal of Public Health*, e1-e6.
- Warner, R.M. (2008). *Applied statistics: From bivariate through multivariate techniques*. Thousand Oaks, CA: Sage.
- Weather, T., Zollinger, T., & Kochhar, K. (2010). Indicators Report for Monitoring Minority Health Disparities in Indiana: Focus on Mental Health and Addictions. Presented to the Stakeholders of the State Master Research Planning Committee.
- L.B. Whitbeck, L.B.; Hoyt, D.R., McMorris, B.J., Chen, X., & Stubben, J.D. (2001). Perceived discrimination and early substance abuse among American Indian children. *Journal of Health and Social Behavior*, 42, 405-424.
- Wilhite, S. (2010). "Effects of the WhyTry Social Skills Program on Students with Emotional and Behavioral Disorders at an Alternative Campus." Doctoral Dissertation, University of North Texas.
- Williams, Leigh (2009). "Horizon Middle School Mental Health, Counseling, and PBS Effective Education, Recipe for Success." Field Research.
- Wilson, S., Hicks, B. M., Foster, K. T., McGue, M., & Iacono, W. G. (2015). Age of onset and course of major depressive disorder: associations with psychosocial functioning outcomes in adulthood. *Psychological medicine*, 45(3), 505-514.

Wingo, A. P., Wrenn, G., Pelletier, T., Gutman, A. R., Bradley, B., & Ressler, K. J. (2010). Moderating effects of resilience on depression in individuals with a history of childhood abuse or trauma exposure. *Journal of Affective Disorders*, 126 (3), 411-414.

Zimmerman, M. A., Stoddard, S. A., Eisman, A. B., Caldwell, C. H., Aiyer, S. M., & Miller, A. (2013). Adolescent Resilience: Promotive Factors That Inform Prevention. *Child Development Perspectives*, 7(4), 215-220.

# Appendix

## FOCUS GROUP QUESTIONS – PARENTS

1. How much stress do you think adolescents are under, and why?
2. What does this stress look like in adolescents? (eg.: he/she cries frequently, sleep too much, is not hungry, do not socialize)
3. What do you think is causing stress in adolescents?
4. What might parents do that causes more stress to their adolescent child?
5. What can parents do to help their adolescent child deal with stress?
6. How sad do you think adolescents are in general, and why?
7. How worried are you about the behavior of adolescents in their daily life environment, and why?
8. What specifically are adolescent children doing that worries you, and why?
9. How much do you think the new culture is related to the stress in Latino adolescent children, and why?

## ABOUT THE CONTRIBUTORS



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Ms. Katrina Conrad is the Community Research and Outreach Coordinator at the Indiana University Richard M. Fairbanks School of Public Health. She received her MPH degree from the same school, with a concentration in Social and Behavioral Sciences. In her role at the Fairbanks School of Public Health, she serves as the liaison between the community and the academic team throughout Community Based Participatory Research collaborations. Katrina has served as the overall research manager since beginning the project as a graduate student, and now serves as the YLYS Program Director.



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Dr. Silvia Bigatti is an Associate Professor at the Indiana University Richard M. Fairbanks School of Public Health. She graduated from the Joint Program in Clinical Psychology between University of California San Diego and San Diego State University with a degree in Clinical Psychology and a Behavioral Medicine specialization. Silvia completed her clinical internship at Yale University School of Medicine and has since been an academic and researcher primarily interested in the behavior, coping, and outcomes associated with chronic stress, such as that related to immigration and acculturation. She partners with various community organizations to conduct CBPR research focused on family health. Silvia serves as the Academic Team Principal Investigator.





## Virna Diaz

*Executive Director for the Latino Health Organization*

Ms. Virna Diaz is the Executive Director for the Latino Health Organization, which is an Indianapolis-based nonprofit that exists to reduce health disparities faced by the Latino community, through education, advocacy, and leadership. She has been in this role for 6 years. Virna serves as the Community Team Principal Investigator.



## Monica A. Medina, PhD

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Dr. Medina is a Clinical Associate Professor and Interim Director of the Center for Urban and Multicultural Education (CUME) at the IUPUI School of Education. As the former Executive Director of a multiservice community center, The Hispanic Center, Monica brings an interdisciplinary understanding of urban issues and continues to preserve a vast network of Community Partners. Monica joined the research team when the intervention was in the early stages of development. In her role, Monica brings a multitude of experience in working with youth, running youth programs and camps. Monica assists with the logistics of the program, including leading the mentor training and supervision components.





## Magdy Mirabal, MHA

*Consultant with the Latino Health Organization*

Ms. Magdy Mirabal has been a consultant with the Latino Health Organization for several years. Magdy co-leads participant recruitment for the academic-community collaborative research projects and assists with community outreach. She has been on the research team since the pilot study began in 2012.



## Tess D. Weathers, MPH

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Ms. Tess Weathers is a Research Associate at the Indiana University Richard M. Fairbanks School of Public Health. She graduated *magna cum laude* from East Tennessee State University in 1985 with a B.S. in Biology and received her MPH in Epidemiology from the Indiana University School of Medicine in 2003. She has over twenty years of experience in health research, having served several years as the Clinical Research Program Director for the IU Cancer Center prior to joining the Fairbanks School of Public Health. Tess serves as the team's data management and analyses expert.



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